

Mathematics, Grades 4, 8, and 11

Chart 1: 4, 8, 11 M

The chart below shows the National Percentile Ranks for grades 4, 8, and 11

- In 2001, grade 4 scored an NPR of 62%, grade 8 a NPR of 57%, and grade 11 a NPR of 61%.
- In 2002, scores for grades 4 and 11 remained consistent while grade 8 increased slightly.

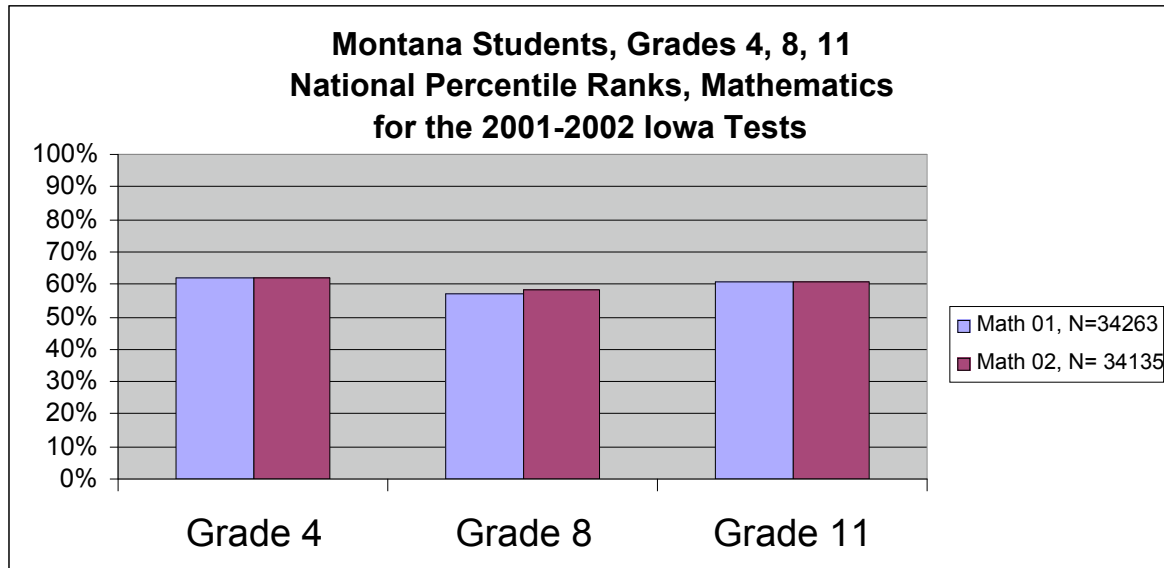


Table 1: 4, 8, 11 M

Math National Percentile Rank for each disaggregation across Montana in 2001 and 2002.

Groups	Grade 4		Grade 8		Grade 11	
	2001	2002	2001	2002	2001	2002
All Students	62%	62%	57%	58%	61%	61%
Students Without Disabilities	66%	65%	60%	62%	64%	64%
Students With Disabilities	31%	31%	25%	23%	26%	26%
Female Students	60%	61%	58%	59%	60%	61%
Male Students	62%	63%	57%	57%	62%	62%
Native American Students	40%	40%	33%	32%	41%	39%
White Students	66%	65%	60%	62%	63%	63%
Students on Free/Reduced Lunch	51%	50%	45%	45%	49%	48%
LEP*	Na	29%	Na	24%	Na	34%

*LEP 2001 data were incomplete.

Table 2: 4, 8, 11 M

Math: The table below shows the percentage of students for each disaggregation scoring in each performance category in grades 4, 8, and 11 for 2001 and 2002.

Groups		Grade 4				Grade 8				Grade 11			
		Advanced Stanines 8-9	Proficient Stanines 5-7	NP Stanines 4	Novice Stanines 1-3	Advanced Stanines 8-9	Proficient Stanines 5-7	NP Stanines 4	Novice Stanines 1-3	Advanced Stanines 8-9	Proficient Stanines 5-7	NP Stanines 4	Novice Stanines 1-3
All Students	2001	14%	59%	14%	12%	15%	54%	15%	16%	17%	59%	12%	12%
	2002	14%	58%	15%	13%	14%	54%	15%	17%	17%	59%	12%	12%
Students Without Disabilities	2001	16%	61%	13%	9%	16%	57%	15%	12%	18%	62%	11%	9%
	2002	16%	61%	13%	10%	16%	58%	14%	12%	18%	62%	11%	9%
Students With Disabilities	2001	2%	34%	22%	42%	1%	19%	21%	59%	1%	23%	25%	52%
	2002	3%	31%	22%	44%	1%	19%	22%	58%	1%	22%	23%	54%
Female Students	2001	13%	60%	15%	12%	13%	57%	16%	14%	15%	63%	12%	10%
	2002	13%	59%	15%	13%	13%	58%	15%	14%	14%	61%	14%	11%
Male Students	2001	16%	58%	14%	13%	16%	50%	15%	19%	20%	56%	11%	13%
	2002	16%	57%	13%	14%	15%	51%	15%	19%	19%	56%	12%	13%
Native American Students	2001	4%	43%	23%	29%	3%	32%	21%	44%	5%	43%	19%	33%
	2002	4%	42%	23%	31%	2%	31%	21%	46%	4%	41%	22%	33%
White Students	2001	16%	61%	13%	10%	16%	57%	14%	12%	19%	61%	11%	10%
	2002	16%	61%	13%	10%	16%	57%	15%	12%	18%	60%	12%	10%
Students on Free/Reduced Lunch	2001	7%	55%	18%	20%	7%	44%	20%	30%	9%	51%	17%	23%
	2002	7%	52%	19%	22%	7%	44%	19%	30%	8%	51%	18%	23%
LEP*	2001	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na
	2002	2%	28%	25%	45%	2%	20%	20%	58%	5%	30%	22%	43%

*LEP 2001 data were incomplete.

Table 3: 4, 8, 11 M

Customized Skills Reports: Montana Mathematics standards tested in the 2001 and 2002 Iowa Tests

Standard	Grade 4				Grade 8				Grade 11			
	# of Items		Percent Correct		# of Items		Percent Correct		# of Items		Percent Correct	
Use math processes to solve problems, estimate and communicate.	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002
	29	29	64%	64%	42	42	57%	56%	29	29	55%	55%
Use numbers and operations.	67	67	64%	64%	81	81	53%	53%	46*	46*	56%	56%
Use algebraic concepts, processes and language.	10	10	72%	72%	18	18	58%	58%	15*	15*	56%	56%
Understand shape and use geometry.	7*	7*	66%	67%	7*	7*	53%	53%	Na	Na	Na	Na
Understand and use measurement attributes and processes.	9*	9*	52%	51%	13*	13*	55%	55%	7*	7*	46%	45%
Use data analysis, probability and statistics.	16*	16*	63%	63%	19	19	68%	67%	5*	5*	62%	62%
Use patterns, relations and functions.	Na	Na	9	59%	4*	4*	64%	64%	5*	5*	53%	54%
* The Iowa Tests measure the knowledge dimension of the Montana Standard, but do not adequately measure the application aspect.												

Tables 4a and 4b: 11 M

ACT Mathematics results for high school graduating classes of 2001 and 2002.

	Average Score All National	Average Score All Montana	Average Score White Montana	Average Score Native American Montana
2001	20.7	21.3	21.6	17.1
2002	20.6	21.4	21.45	17.65

Number of Montana students participating in the ACT

	Total Montana Students	White Montana	Native American Montana
2001	6,641	5,699	319
2002	6,368	5,460	300

Tables 5a and 5b: 11 M

SAT Mathematics results for the high school graduating classes of 2001 and 2002.

	Average Score All National	Average Score All Montana	Average Score White Montana	Average Score Native American Montana
2001	514	539	541	468
2002	516	547	549	500

Number of Montana students participating in the SAT in 2001 and 2002

	Total Montana Students	White Montana	Native American Montana
2001	2,762	2,342	39
2002	2,870	2,314	47

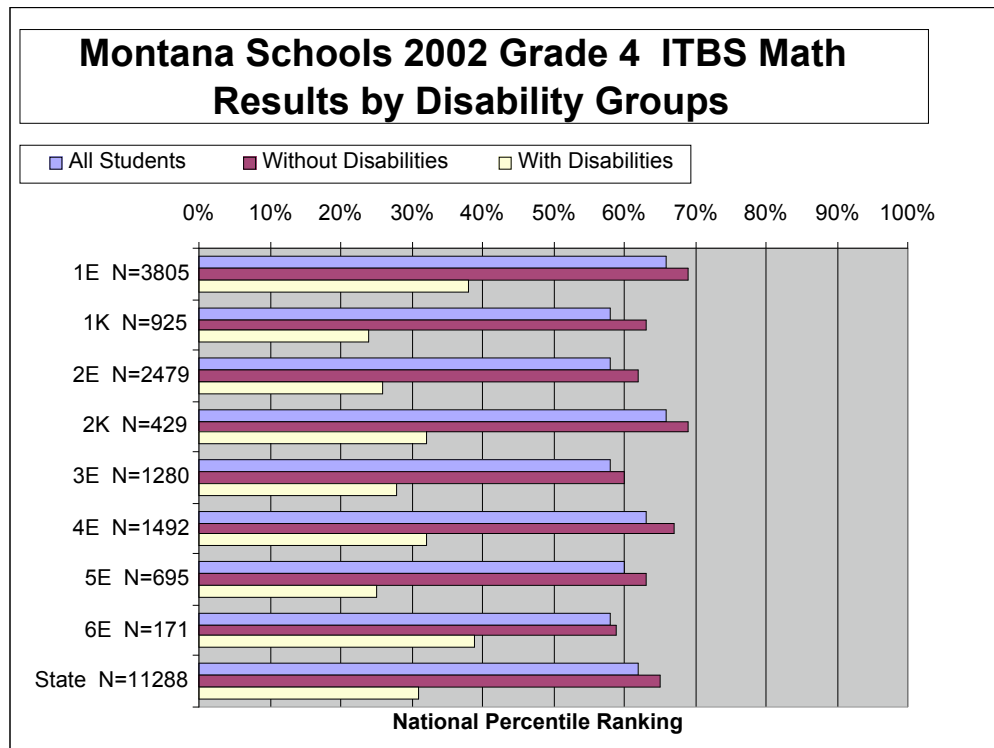
Table 6: 4, 8, 11 M

NAEP data from 1994 and 1998 are included to add the picture of student achievement in Math. Although NAEP data give another perspective to the picture of Montana students in grades four and eight tested in 1994 and 1998, these are not the same 4th and 8th grade students measured in the 2002 statewide assessment.

With the scores of Montana White and Montana Native American students are percent of students who scored basic or above. It should be noted that the number of White students tested is considerably larger and therefore, generalizations are safer. For example, in the 1994 grade 4 test, 1,972 Montana White students and 226 Montana Native American students were included in the testing sample.

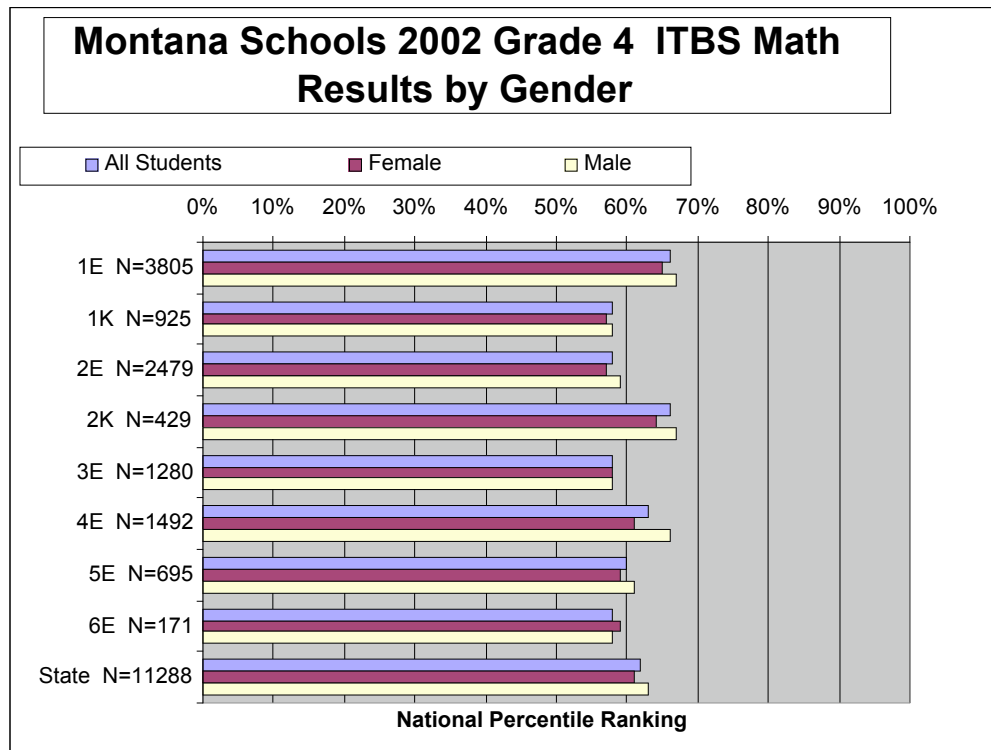
	Average Score					
Grade:Year	All National	White National	Native American National	All Montana	White Montana	Native American Montana
4: 1996	224	232	216	228	231 (76%)	209 (43%)
4: 2000	228	236	216	230	234 (78%)	212 (49%)
8: 1996	272	282	264	283	287 (79%)	265 (55%)
8: 2000	275	286	255	287	290 (84%)	253 (41%)

Chart 4.1 M



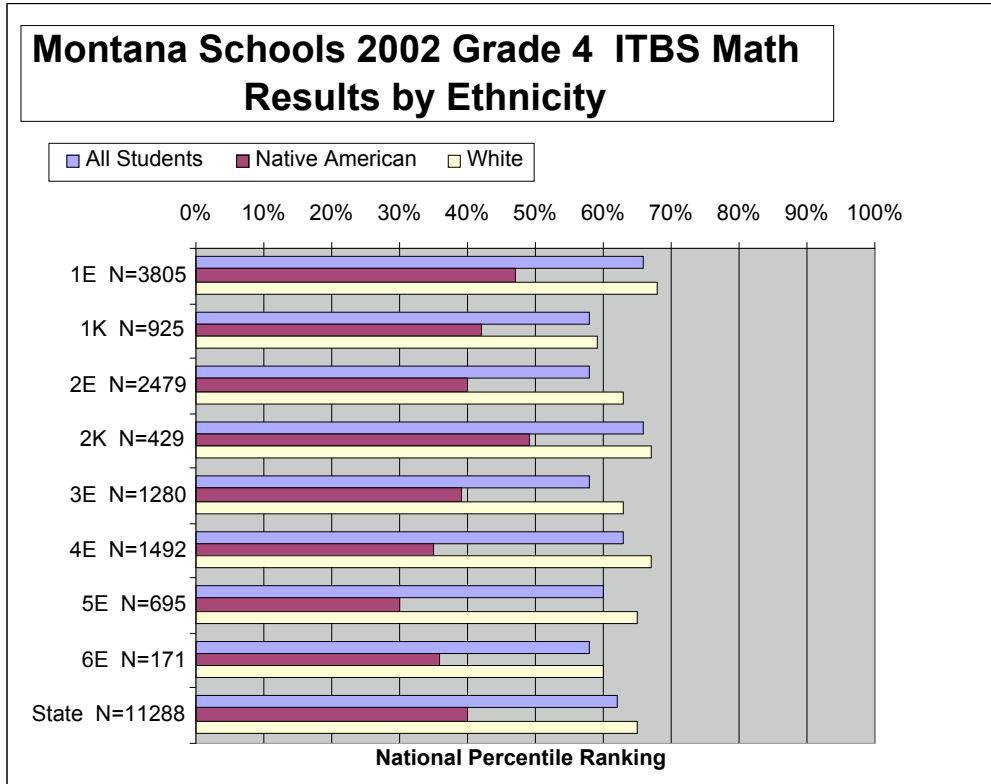
1. All students
 - The Math NPR for all Montana grade 4 students is 62%, the same as 2001.
2. Students without disabilities
 - Statewide, the NPR for students without disabilities is 65%, one percentage point below 2001. That number is relatively stable with all districts plus or minus 2-4 percentage points.
3. Students with disabilities
 - Statewide, the NPR for students with disabilities is 31%, the same as in 2001. That number is relatively stable with all districts plus or minus 4-6 percentage points.
4. Comparisons
 - Statewide, Montana students without disabilities scored 34 percentage points above students with disabilities, 65% and 31% respectively.

Chart 4.2 M



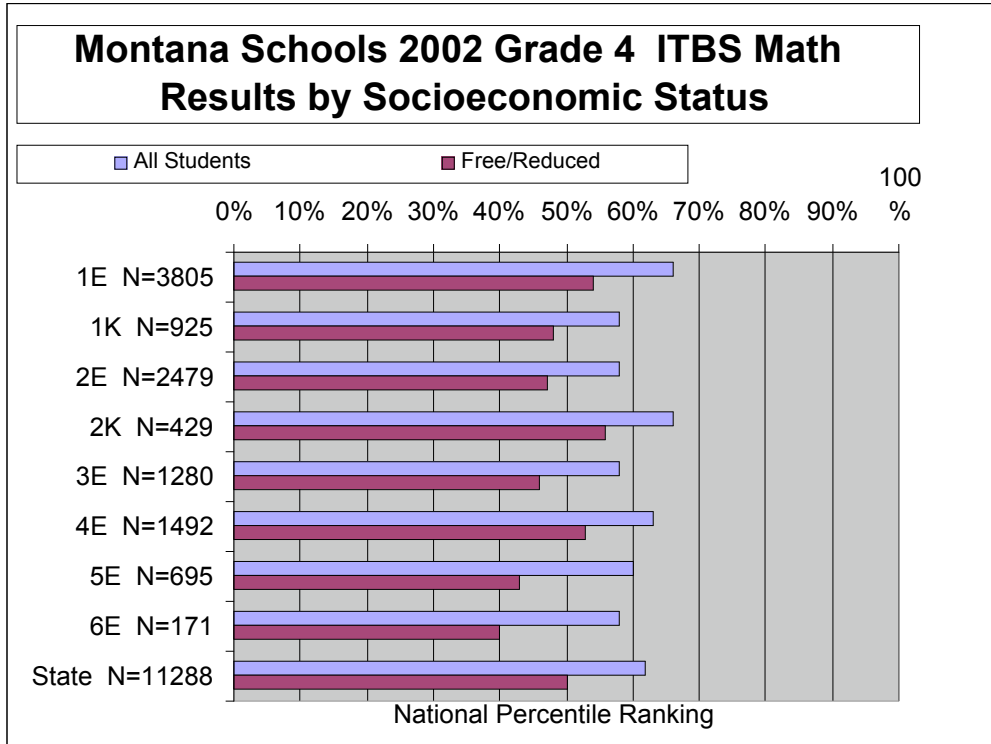
1. All students
 - The Math NPR for all Montana grade 4 students is 62%.
2. Female students
 - Statewide, the NPR for female students is 61%, one percentage point above 2001. That number is stable with all district size categories plus or minus 2-4 percentage points.
3. Male students
 - Statewide, the NPR for male students is 63%, one percentage point above 2001. That number is relatively stable with most district size categories plus or minus 4-6 percentage points.
4. Comparisons
 - Statewide, male students scored two percentage points above female students. That number is stable.

Chart 4.3 M



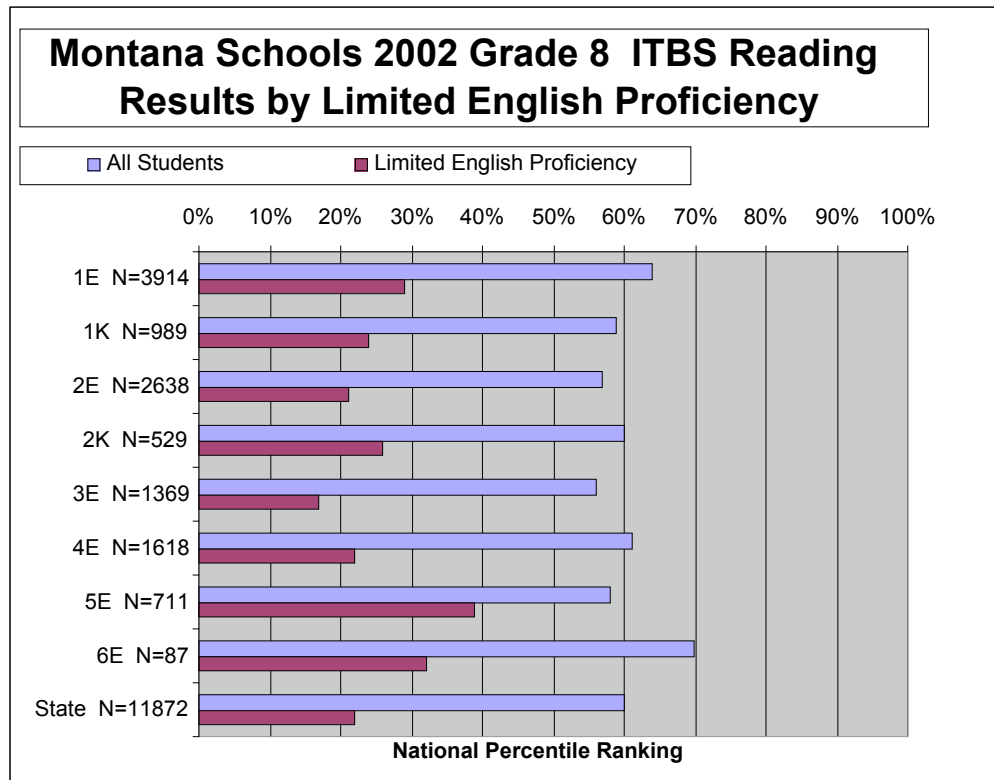
1. All students
 - The Math NPR for all Montana grade 4 students is 62%.
2. Native American students
 - Statewide, the NPR for Native American students is 40%, the same as 2001. That number is somewhat stable with variations that occur where the number of Native American students tested is small.
3. White students
 - Statewide, the NPR for White students tested is 65%, one percentage point below 2001. That number is relatively stable with all district size categories plus or minus 4-6 percentage points.
4. Comparisons
 - Statewide, Montana White students scored 25 percentage points above Native American students, 65% and 40% respectively. That number is somewhat stable.

Chart 4.4 M



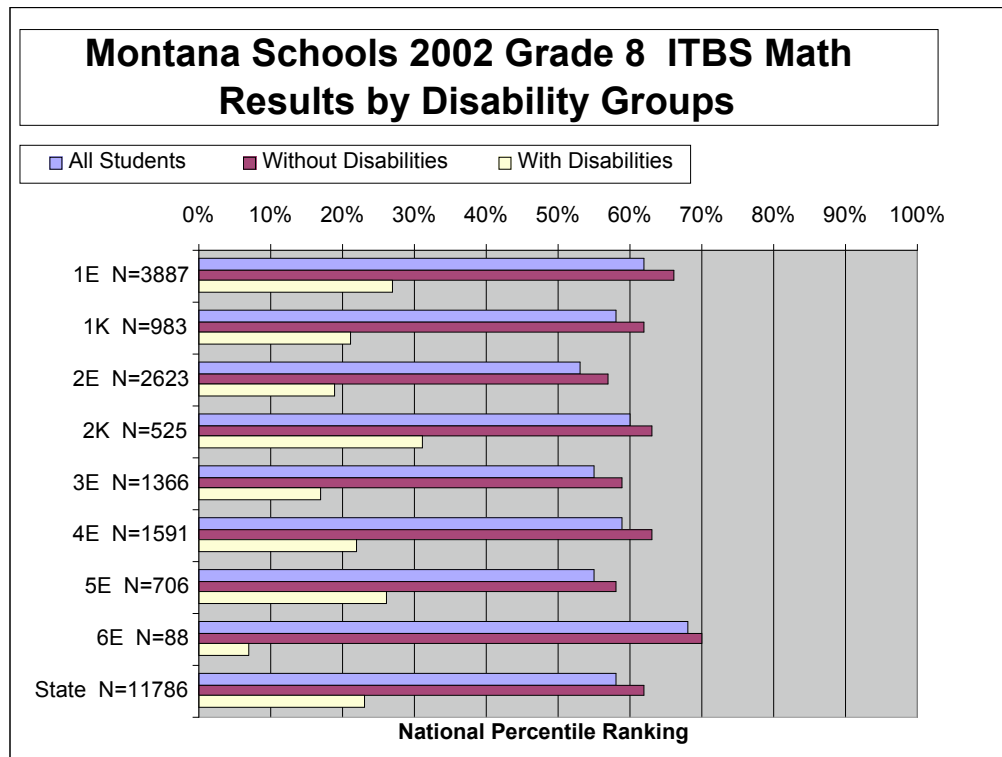
1. All students
 - The Math NPR for all Montana grade 4 students is 62%.
2. Students participating in free/reduced lunch programs
 - Statewide, the NPR for students participating in free/reduced lunch programs is 50%, one percentage point below 2001. That number is relatively stable with most district size categories plus or minus 4-6 percentage points except 6E where the number of students tested is too small for comparisons.
3. Comparisons
 - Statewide, all Montana students scored twelve percentage points above students participating in free/reduced lunch programs, 62% and 50% respectively.

Chart 4.5 M



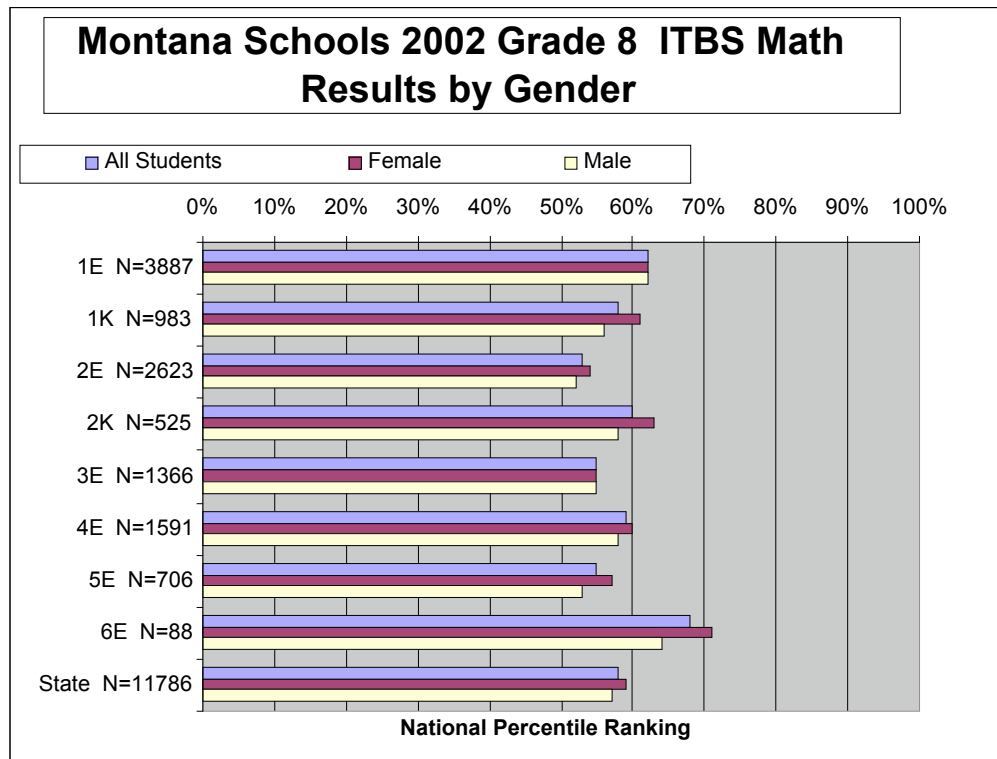
1. All students
 - The Math NPR for all Montana grade 4 students is 62%.
2. Students with limited English proficiency (LEP)
 - Statewide, the NPR for LEP students is 29%. (2001 LEP data were incomplete.) The NPR scores vary among school size categories because of the wide variation in the number of LEP students tested.
3. Comparison
 - Statewide, all Montana students scored 33 percentage points higher than limited English proficient students. That number varies among school size categories because of the wide variation in the number of LEP students tested.

Chart 8.1 M



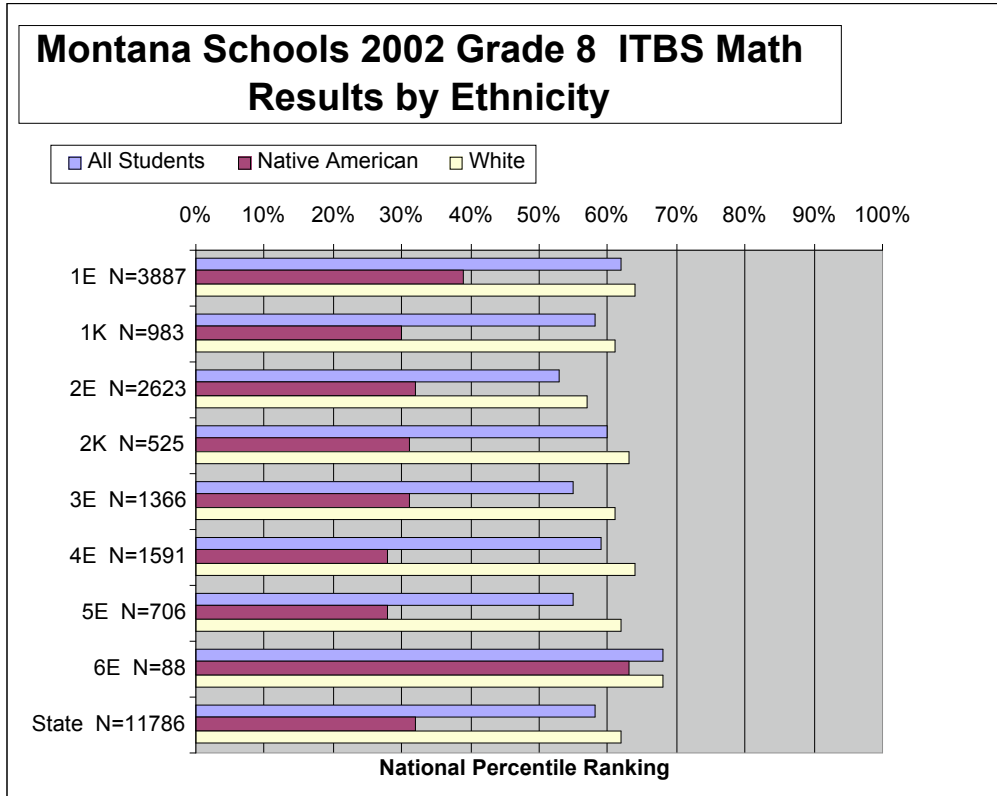
1. All students
 - The Math NPR for all Montana grade 8 students is 58%, one percentage point above 2001.
2. Students without disabilities
 - Statewide, the NPR for students without disabilities is 62%, two percentage points above 2001. That number is relatively stable across the state with most district size categories plus or minus 3-4 percentage points except 6E where the number of students tested is too small for comparisons.
3. Students with disabilities
 - Statewide, the NPR for students with disabilities is 23%, two percentage points below 2001. That number is relatively stable across the state with most district size categories plus or minus 4-6 percentage points except 2K and 6E where the number of students with disabilities tested is too small for comparisons.
4. Comparisons
 - Statewide, Montana students without disabilities scored 39 percentage points above students with disabilities. This number is relatively stable across the state.

Chart 8.2 M



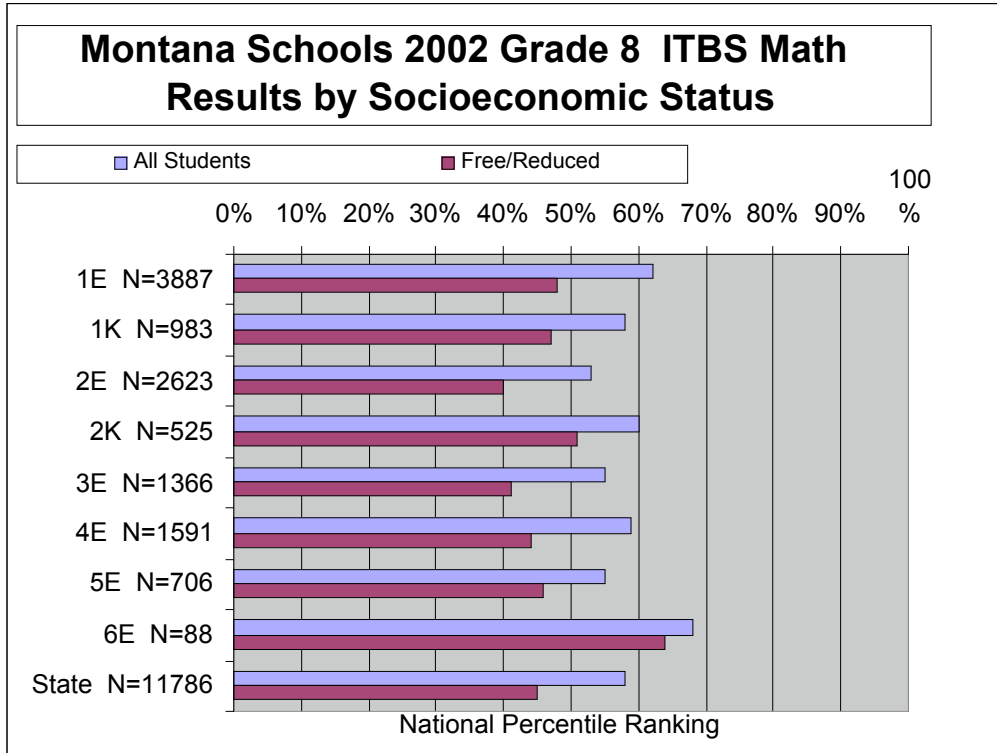
1. All students
 - The Math NPR for all Montana grade 8 students is 58%.
2. Female students
 - Statewide, the NPR for female students is 59%, one percentage point above 2001. That number is relatively stable with most district size categories plus or minus 2-4 percentage points except 6E where the number of female students tested is too small for comparisons.
3. Male students
 - Statewide, the NPR for male students is 57%, the same as 2001. That number is stable across the state except for district size 6E where the number of male students tested is too small for comparisons.
4. Comparisons
 - Statewide, female students scored two percentage points above male students, 59% and 57% respectively.

Chart 8.3 M



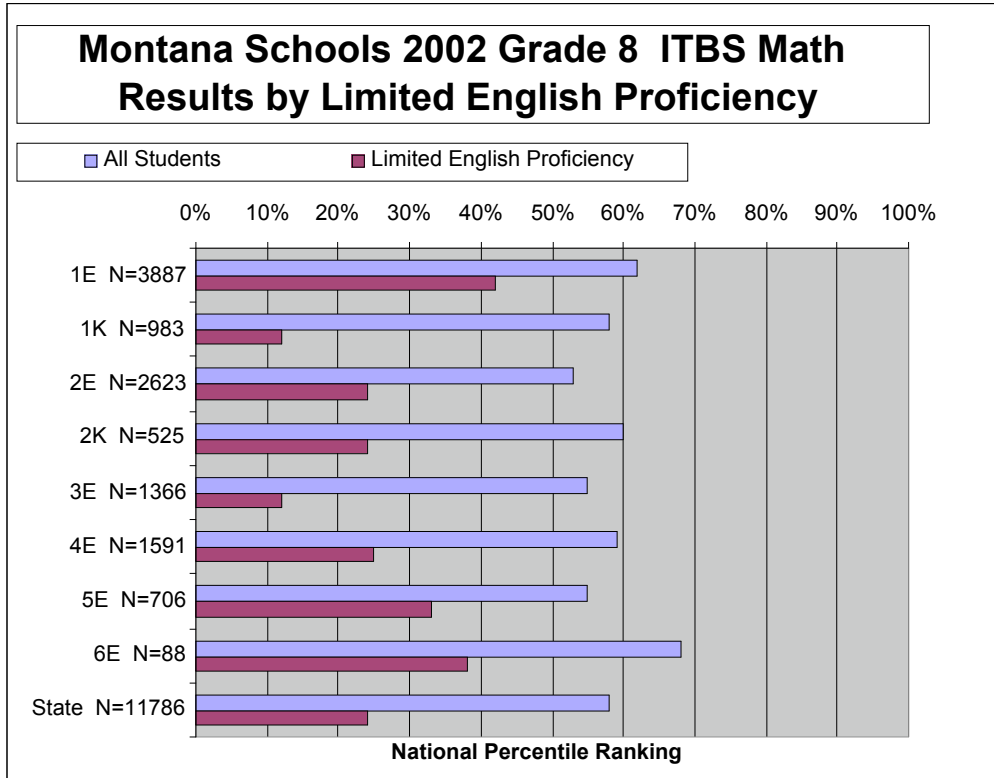
1. All students
 - The Math NPR for all Montana grade 8 students is 58%.
2. Native American students
 - Statewide, the NPR for Native American students is 32%, one percentage point below 2001. That number is relatively stable across the state with most district size categories plus or minus 4-6 percentage points except 6E where the number of Native American students tested is too small for comparisons.
3. White students
 - Statewide, the NPR for White students is 62%, two percentage points above 2001. That number is stable across the state with all districts within 4-6 percentage points.
4. Comparisons
 - Statewide, Montana White students scored 30 percentage points above Native American students. That number is stable across the state except in district size 6E.

Chart 8.4 M



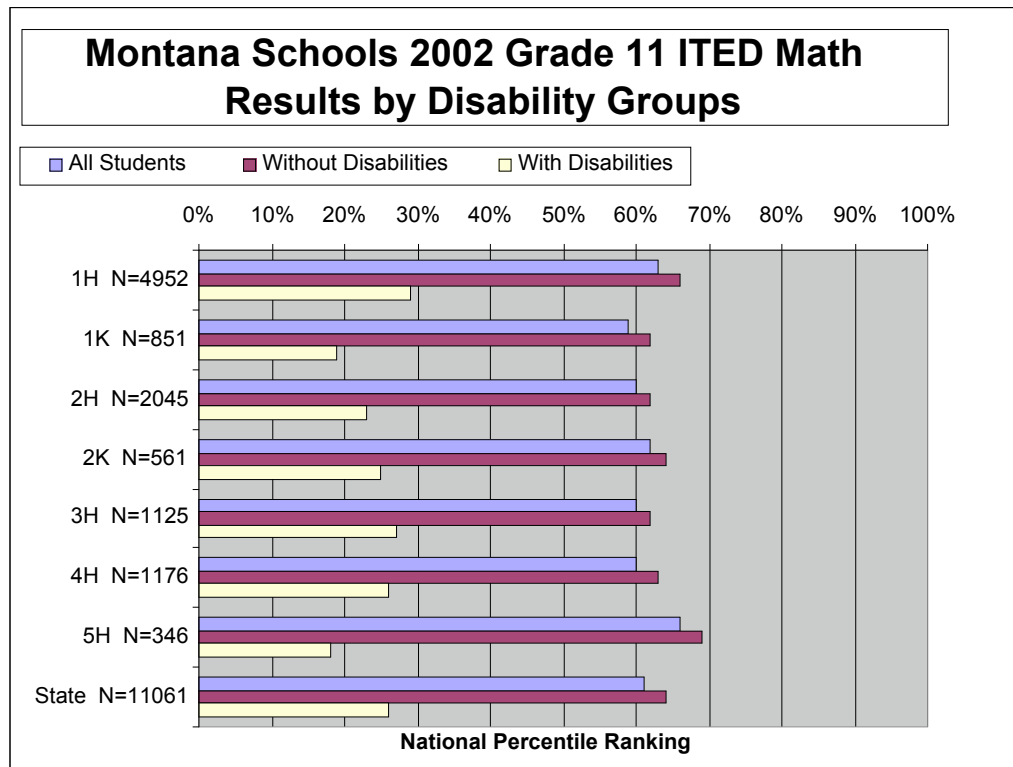
1. All students
 - The Math NPR for all Montana grade 8 students is 58%.
2. Students participating in free/reduced lunch programs
 - Statewide, the NPR for students participating in free/reduced lunch programs is 45%, the same as 2001. That number is somewhat stable with most district size categories plus or minus 4-6 percentage points except 6E where the number of participating students tested is too small for comparisons.
3. Comparisons
 - Statewide, all Montana students scored thirteen percentage points above students participating in free/reduced lunch programs, 58% and 45% respectively.

Chart 8.5 M



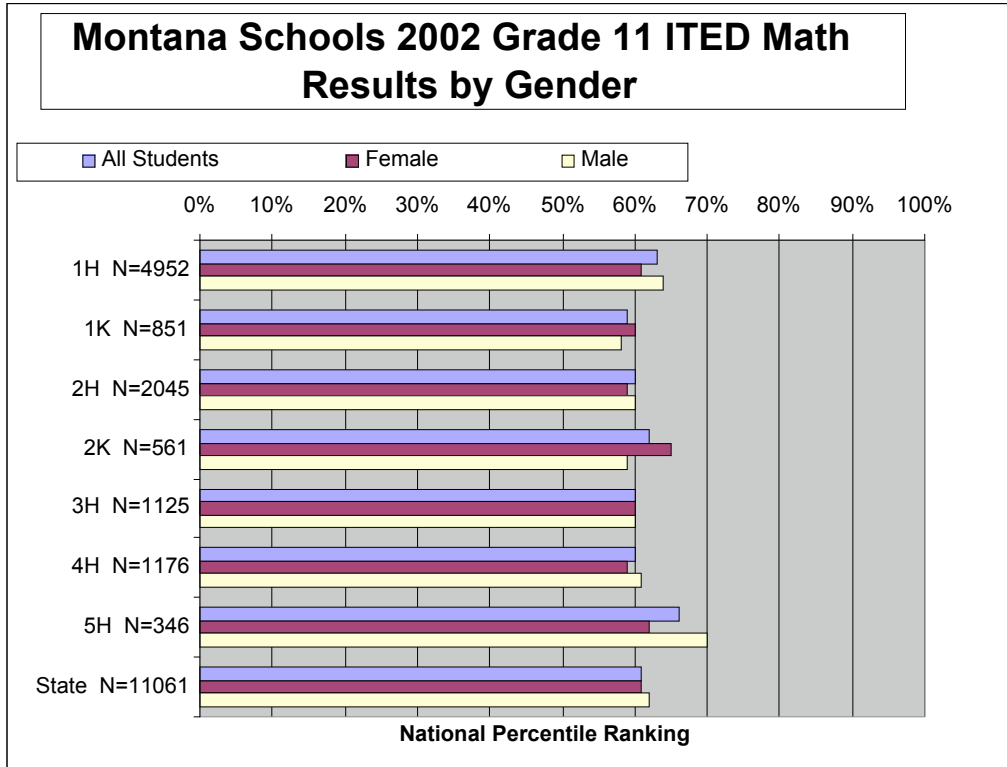
1. All students
 - The Math NPR for all Montana grade 8 students is 58%.
2. Students with limited English proficiency (LEP)
 - Statewide, the NPR for LEP students is 24%. (2001 LEP data were incomplete.)
The NPR scores vary among school size categories because of the wide variation in the number of LEP students tested.
3. Comparison
 - Statewide, all Montana students scored 34 percentage points higher than limited English proficient students. That number varies among school size categories because of the wide variation in the number of LEP students tested.

Chart 11.1 M



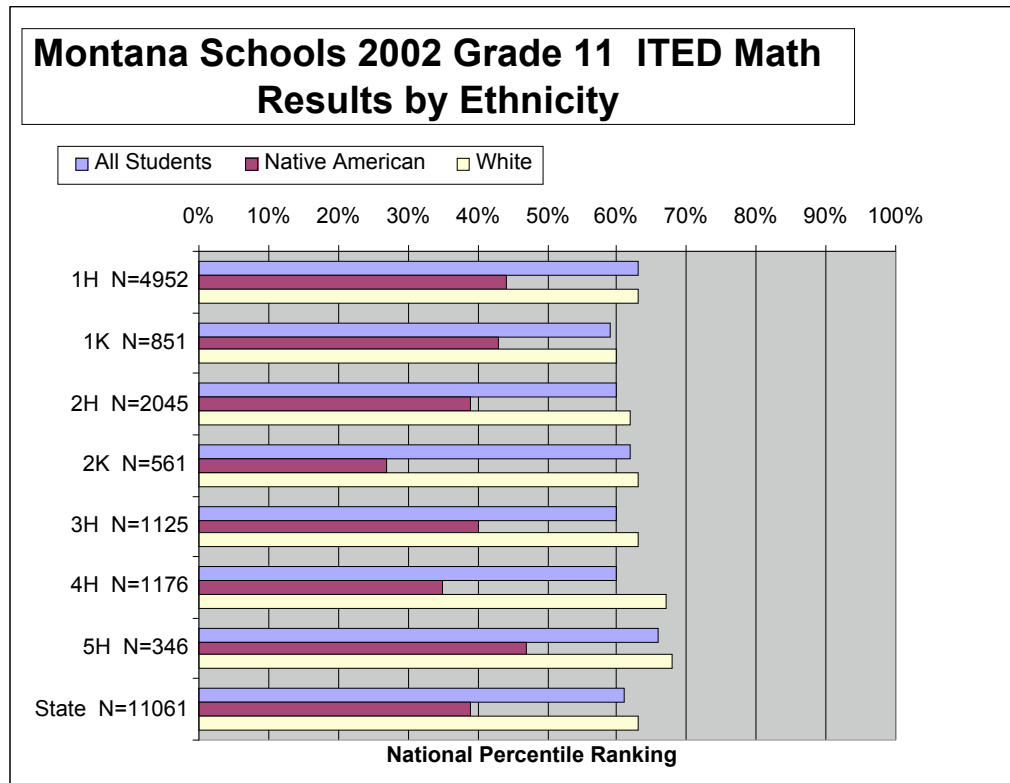
1. All students
 - The Math NPR for all Montana grade 11 students is 61%, the same as 2001.
2. Students without disabilities
 - Statewide, the NPR for students without disabilities is 64%, the same as 2001. That number is stable with all district size categories plus or minus 2-4 percentage points.
3. Students with disabilities
 - Statewide, the NPR for students with disabilities 26%, the same as 2001. That number is relatively stable across the state with all district size categories plus or minus 4-6 percentage points.
4. Comparisons
 - Statewide, Montana students without disabilities scored 38 percentage points above students with disabilities, 64% and 26% respectively. That number is relatively stable across the state.

Chart 11.2 M



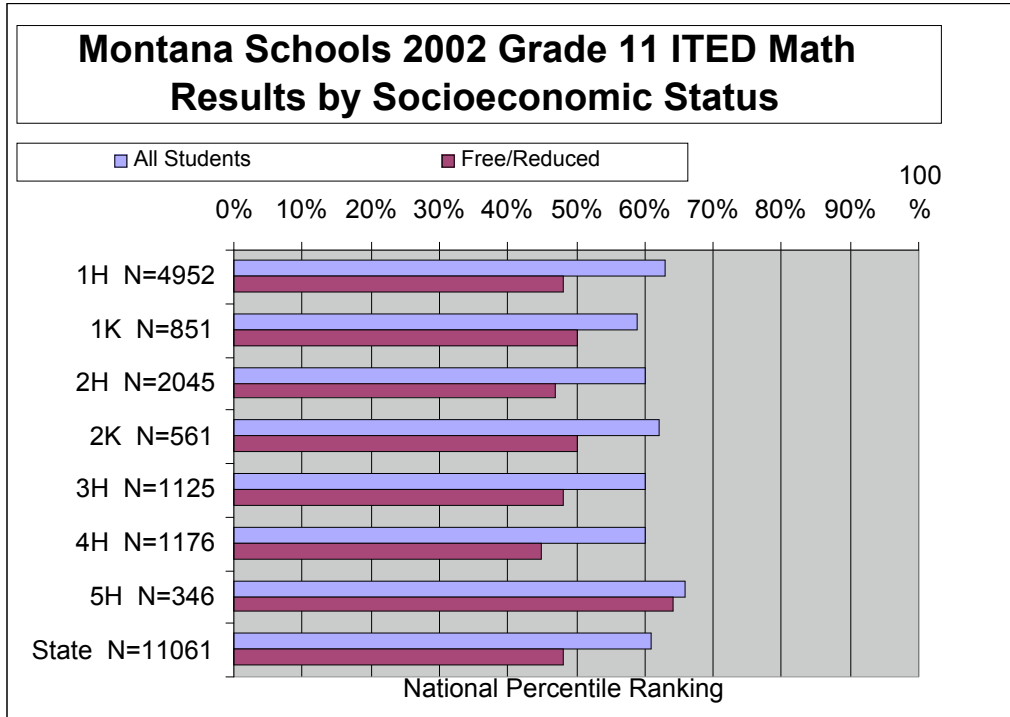
1. All students
 - The Math NPR for all Montana grade 11 students is 61%.
2. Female students
 - Statewide, the NPR for female students is 61%, one percentage point above 2001. That number is stable across the state with all district size categories plus or minus 2-4 percentage points.
3. Male students
 - Statewide, the NPR for male students is 62%, the same as 2001. That number is relatively stable across the state with all district size categories plus or minus 2-6 percentage points.
4. Comparisons
 - Statewide, male students scored one percentage point above female students, 62% and 61% respectively. That number is relatively stable across the state.

Chart 11.3 M



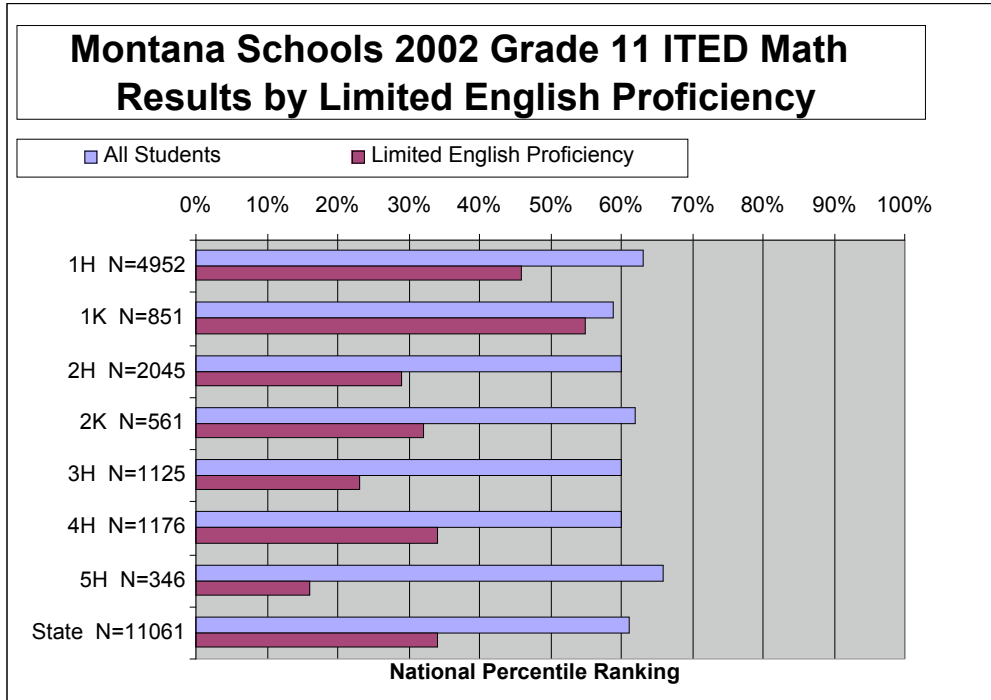
1. All students
 - The Math NPR for all Montana grade 11 students is 61%.
2. Native American students
 - Statewide, the NPR for Native American students is 39%, two percentage points below 2001. That number is somewhat stable across the state with most district size categories plus or minus 4-6 percentage points except for 2K and 5H where the number of Native American students tested is too small for comparisons.
3. White students
 - Statewide, the NPR for White students is 63%, the same as 2001. That number is stable across the state with all district size categories plus or minus 2-4 percentage points.
4. Comparisons
 - Statewide, Montana White students scored 24 percentage points above Native American students, 63% and 39% respectively. That number is relatively stable across the state.

Chart 11.4 M



1. All students
 - The Math NPR for all Montana grade 11 students is 61%.
2. Students participating in free/reduced lunch programs
 - Statewide, the NPR for students participating in free/reduced lunch programs is 48%, one percentage point below 2001. That number is relatively stable with most district size categories plus or minus 2-4 percentage points except 5H where the number of participating students tested is small.
3. Comparisons
 - Statewide, all Montana students scored thirteen percentage points above students participating in free/reduced lunch programs, 61% and 48% respectively.

Chart 11.5 M



1. All students
 - The Math NPR for all Montana grade 11 students is 61%.
2. Students with limited English proficiency (LEP)
 - Statewide, the NPR for LEP students is 34%. (2001 LEP data were incomplete.)
The NPR scores vary among school size categories because of the wide variation in the number of LEP students tested.
3. Comparison
 - Statewide, all Montana students scored 27 percentage points above limited English proficient students. That number varies among school size categories because of the wide variation in the number of LEP students tested.